

Application No. 10/758,488
Amdt. dated December 21, 2005
Reply to Office action of November 21, 2005

Remarks/Arguments

Claims 1-17 and 37 remain pending in this Application. Claims 18-36 and 38-96 have been withdrawn. In the Office Action mailed on November 21, 2005, the Examiner requested the claims be restricted to one (1) of eleven (11) inventions that include:

- I. Claims 1-17 and 37, drawn to an isolated thioaptamer;
- II. Claims 18-22, drawn to a method of producing a mature thioaptamer and a mature thioaptamer product;
- III. Claims 23-31, drawn to a method of mediating gene silencing of a target gene in a cell or organism;
- IV. Claims 32-34, drawn to a knockdown cell or organism;
- V. Claims 35-36, drawn to a method of examining the function of a gene product that is a suitable target for drug discovery;
- VI. Claims 38-44, drawn to a method of identifying target sites within an mRNA;
- VII. Claims 45-60, drawn to a combinatorial aptamer library with backbone modifications;
- VIII. Claims 61-63, drawn to a combinatorial aptamer library comprising a unique mix of modified and unmodified nucleotides;
- IX. Claims 64-83, drawn to a method of reducing the expression of a gene in a cell;
- X. Claims 84-93, drawn to a method of attenuating expression of a target gene in cultured cell comprising using RNA thioaptamer; and
- XI. Claims 94-96, drawn to a method of attenuating expression of a target gene in mammalian cell using a thioaptamer.

Applicants respectfully *traverse* the restriction and address the basis for the Examiner's restriction below.

TRAVERSE

Every requirement to restrict has two aspects: (1) the reasons (as distinguished from the mere statement of conclusion) why the inventions *as claimed* are either independent or distinct, and (2) the reasons for insisting upon restriction therebetween. MPEP § 808. [Emphasis in the original].

With regard to the first aspect, the Action fails to provide a reason as to why Groups I, VII and VIII identified in the Official Action are distinct, as it is assumed that due to their nature they would all fall within the same Class; however, the Class is not listed in the Action. While it is argued in the Action that Groups I, VII and VIII are drawn to structurally different compounds and compound libraries that have different functions/effects; they all have similar structure, effect and function and may be examined together without the

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need to reach into other Classes. Furthermore, they are within the same statutory subject matter, namely, compositions of matter that are aptamers and nucleic acid aptamers libraries. Similarly, Groups II, III, V, VI, X, and XI, which relate to methods of making and using all have similar effect and function and may be examined together as well. Applicants earnestly request that Groups I, VII and VIII and IV be rejoined and Groups II, III, V, VI, X, and XI be rejoined.

With regard to the second aspect, the reasons under MPEP § 808 given by the Examiner for insisting upon exercising his authority under 35 U.S.C. § 121 to require restriction must be reasons approved by the Commissioner. The reasons approved by the Commissioner are set out in MPEP § 803: (1) the inventions must be independent (see MPEP § 802.01, § 806.04, § 808.01) or distinct as claimed (see MPEP § 806.05 - § 806.05(i); and (2) there must be a serious burden on the Examiner if restriction is not required (see MPEP § 803.02, § 806.04(a)-(j), § 808.01(a) and 808.02). Examiner must provide reasons and/or examples to support conclusions. MPEP § 803.

For purposes of the initial requirement, a serious burden on the examiner may be shown, *prima facie*, if the Examiner shows by appropriate explanation either separate classification, separate status in the art, or a different field of search as defined in MPEP § 808.02. That *prima facie* showing may be rebutted by appropriate showings or evidence by the applicant. MPEP § 803. Applicant respectfully asserts that the Examiner has failed to make a *prima facie* case that restriction is required.

The Action, to which this reply is responsive, provides no substantive reason as to why Groups I-III and IV should be restricted; or why an election of the Species of the invention as claimed are either independent or distinct. In support of the Restriction it is argued that the Groups are drawn to structurally different compound libraries that have different functions/effects. However, the inventions in Groups I, VII and VIII and IV (and similarly Groups II, III, V, VI, X, and XI) have similar structures, functions and mechanism of operation. Furthermore, Groups I, VII and VIII and IV (and similarly Groups II, III, V, VI, X, and XI) do not represent a serious burden on the examiner if not restricted. The Action merely provides a conclusion that such is the case.

SPECIES ELECTION

In support of the Species Election the Action argues that the structure and mode of action are different; however, the species share similar structures, functions and mechanism of operation. For example, the similarities between aptamer (1) a short interfering RNA (siRNA); (2) a micro, interfering RNA (miRNA); (3) a small, temporal RNA (stRNA); and (4) a short, hairpin RNA (shRNA). The similarities in structure and action

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between 1-4 are apparent and as such the election requirement should be withdrawn to evaluate comprehensively the invention.

In the case of the present invention, it is both the sequence and the modifications that are the invention. Examination of both aspects will be required to demonstrate the patentability of the present invention. As such, in this case it would benefit the examination to rejoin the modifications and withdraw the Species election because it is necessary to evaluate comprehensively the invention. Applicants earnestly request that the Examiner allow Applicants some latitude during examination given the novel characteristics that the Applicant's claim as their invention. Therefore, Applicants submit respectfully that they have rebutted the *prima facie* requirements of MPEP § 803; and, alternatively, request respectfully that the Species be evaluated together and rejoined. Nevertheless, a provisional election is made hereinbelow.

ELECTION

Nevertheless, Applicants elect provisionally, with *traverse*:

Group I, claims 1-17 and 37 drawn to an isolated thioaptamer; and Species short interfering RNA (siRNA).

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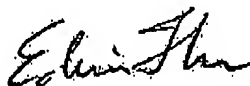
Conclusion

In light of the remarks and arguments presented above, Applicants respectfully submit that the claims in the Application are in condition for allowance. Favorable consideration and allowance of the pending claims is therefore respectfully requested.

If the Examiner has any questions or comments, or if further clarification is required, it is requested that the Examiner contact the undersigned at the telephone number listed below.

Dated: December 21, 2005

Respectfully submitted,



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